

Navy Case 95935

PATENT

In the Claims:

A complete listing of claims in the instant application is provided below as follows:

Claims 1-8 (Withdrawn)

1 9. (Currently amended) A method of making a moisture-absorbing
2 material that expands linearly upon moisture absorption comprising
3 the steps of:

4 providing a natural cellulosic material that is defined by
5 hollow fibrous tubes;

6 drying said natural cellulosic material;

7 combing, after said step of drying, said natural cellulosic
8 material in a direction to substantially longitudinally align said
9 hollow fibrous tubes;

10 stretching, after said step of combing, said hollow fibrous
11 tubes substantially in said direction wherein said hollow fibrous
12 tubes are placed in a stretched state;

13 ~~twisting, after said step of stretching is commenced,~~ said
14 hollow fibrous tubes in said stretched state substantially about
15 said direction; and

16 compressing, after said step of twisting, said hollow fibrous
17 tubes in said direction, wherein a dried-in strain of said natural
18 cellulosic material is greatest along said direction, and wherein
19 said hollow fibrous tubes expand along said direction when exposed

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20 to moisture.

1 10. (Original) A method according to claim 9 further comprising
2 the step of mixing a powder material with said hollow fibrous
3 tubes wherein said powder material adheres to and resides in said
4 hollow fibrous tubes, said powder material being inert with
5 respect to said natural cellulosic material and initiating a
6 chemical reaction when exposed to water, wherein a product of said
7 chemical reaction is water.

1 11. (Original) A method according to claim 9 wherein said natural
2 cellulosic material is cotton.

1 12. (Original) A method according to claim 10 wherein said powder
2 material is selected from the group consisting of: a mixture of
3 sodium bicarbonate and citric acid; and a mixture of sodium
4 bicarbonate and potassium hydrogen tartrate.

1 13. (Currently amended) A method according to claim 9 10 wherein
2 said powder material is selected such that another product of said
3 chemical reaction is gaseous.

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1 14. (Currently amended) A method of making a moisture-absorbing
2 material that expands linearly upon moisture absorption comprising
3 the steps of:

4 providing cotton in the form of hollow fibrous tubes thereof;
5 drying said cotton;

6 mixing, during said step of drying, a powder material with
7 said hollow fibrous tubes wherein said powder material adheres to
8 and resides in said hollow fibrous tubes, said powder material
9 being inert with respect to said natural cellulosic material and
10 initiating a chemical reaction when exposed to water, wherein a
11 product of said chemical reaction is water;

12 combing, after said step of drying, said cotton in a
13 direction to substantially longitudinally align said hollow
14 fibrous tubes;

15 stretching, after said step of combing, said hollow fibrous
16 tubes substantially in said direction wherein said hollow fibrous
17 tubes are placed in a stretched state;

18 ~~twisting, at least after said step of stretching is~~
19 ~~commenced,~~ said hollow fibrous tubes in said stretched state
20 substantially about said direction; and

21 compressing, after said step of twisting, said hollow fibrous
22 tubes in said direction, wherein a dried-in strain of said cotton
23 is greatest along said direction, and wherein said hollow fibrous
24 tubes expand along said direction when exposed to moisture.

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1 15. (Original) A method according to claim 14 wherein said powder
2 material is selected from the group consisting of: a mixture of
3 sodium bicarbonate and citric acid; and a mixture of sodium
4 bicarbonate and potassium hydrogen tartrate.

1 16. (Original) A method according to claim 14 wherein said powder
2 material is selected such that another product of said chemical
3 reaction is gaseous.